Amendments to the Claims

A complete list of pending claims follows, with indicated amendments:

1-22. (Cancelled).

23. (New) A debugging circuit capable of transmitting a debugging signal through a multiprocessor computer, comprising:

a debug port;

a plurality of microprocessor sockets, each of said microprocessor sockets adapted to receive a microprocessor;

a plurality of switches, each of said plurality of switches is associated with a respective one of said plurality of microprocessor sockets, wherein each switch includes:

a first input to the switch, wherein the first input receives either (a) the debugging signal transmitted from the previous switch or, (b) if there is not a previous switch, the debugging signal from the debug port;

a second input to the switch coupled to the associated microprocessor socket and operable to receive a debugging signal transmitted through a microprocessor, if present, in the associated microprocessor socket; and

a third input coupled to the associated microprocessor socket, wherein the third input receives a logic signal from the associated microprocessor socket that is indicative of whether the associated microprocessor socket is populated by a microprocessor;

wherein the first input is passed by the switch and the second input is not passed by the switch if the logic signal of the third input indicates that the associated microprocessor

socket is not populated by a microprocessor, and wherein the second input is passed by the switch and the first input is not passed by the switch if the logic signal of the third input indicates that the associated microprocessor socket is populated by a microprocessor.

24. (New) The debugging circuit of claim 23, wherein the debug port is electrically coupled to a computer and receives input from and provides output to the computer.

25. (New) The debugging circuit of claim 23, wherein each switch comprises a pair of bipolar transistors.

26. (New) The debugging circuit of claim 23, wherein each switch comprises field effect transistors.

27. (New) A method for transmitting a debugging signal through a multiprocessor computer system, comprising:

transmitting a debugging signal to a debug port of the computer system;

transmitting the debugging signal through or around each microprocessor socket of the computer system, wherein the debugging signal bypasses a microprocessor socket if the microprocessor socket is not occupied by a microprocessor and wherein the debugging signal passes through any microprocessor that occupies a microprocessor socket; and

providing a switch associated with each microprocessor socket, wherein the switch is operable to perform the step of transmitting a debugging signal through or around each microprocessor socket by,

receiving at the switch a first signal representing either (a) the debugging signal from the previous switch or, (b) if there is not a previous switch, the debugging signal from the debug port;

receiving at the switch a second signal representing the debugging signal transmitted from the microprocessor socket;

receiving at the switch a third signal representing a logical signal from the microprocessor socket that is indicative of whether the associated microprocessor socket is occupied by a microprocessor; and

passing the first signal and blocking the second signal if the third signal indicates that the microprocessor socket is not occupied by a microprocessor, and blocking the first signal and passing the second signal if the third signal indicates that the microprocessor socket is occupied by a microprocessor.

28. (New) The method for transmitting a debugging signal through a multiprocessor computer system of claim 27, wherein the step of transmitting a debugging signal to the debug port of the computer system comprises the step of providing a debugging signal from a debugging computer to the debug port of the computer system.

29. (New) The method for transmitting a debugging signal through a multiprocessor computer system of claim 27, wherein each switch comprises a pair of bipolar transistors.

30. (New) The method for transmitting a debugging signal through a multiprocessor computer system of claim 27, wherein each switch comprises field effect transistors.